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S3	7485	DONAT? (10N) GOODS
S4	63747	DONAT? (10N) (SERVICE OR TIME OR VOLUNTEER)
S5	42	S1 AND S2 AND S3 AND S4
S6	27008	DONAT? (10N) BLOOD
S7	3990	DONAT? (10N) TISSUE
S8	17	S5 AND S6
S9	0	S7 AND S8
S10	17	S5 AND S6
S11	7	RD (unique items)

S12 16536518 SERVICE OR VOLUNTEER  
S13 16368038 SERVICE  
S14 280485 VOLUNTEER  
S15 32 S1 AND S2 AND S3 AND S13  
S16 22 RD (unique items)  
S17 15 S16 NOT PY>2001  
S18 1 S17 AND S6  
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...much more effectively than outsiders because they have a better understanding of their particular needs. Donating money instead of aid, however, should only be considered if governments could be trusted to prevent...

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**The shortage in market-inalienable human organs: A consideration of "nonmarket" failures**

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ABSTRACT: It is widely believed that if only a market in organs was allowed, supply would increase and shortages would disappear. However, there is considerable evidence that all the supply has not been wrung out of the donative system. It is argued that shortages in organs are due to inadequate procurement effort rather than the inefficiency of appeals to donor altruism. The insufficiency of effort is ascribed to 1. ignorance of the regulatory authorities and the participants with respect to the nature of the production system in which they are engaged, 2. problems inherent in a production system that relies on exhorting donors, and 3. the well-known limitations of the nonprofit organizations that are the key actors in this production system.

TEXT: Headnote:

By Emanuel D. Thorne\*

Headnote:

ABSTRACT. It is widely believed that if only we allowed a market in organs, supply would increase and shortages would disappear. However, there is considerable evidence that we have not wrung all the supply we can out of the donative system. This essay argues that shortages in organs are due to inadequate procurement effort rather than the inefficiency of appeals to donor altruism. The insufficiency of effort is ascribed to (1) ignorance of the regulatory authorities and the participants with respect to the nature of the production system in which they are engaged, (2) problems inherent in a production system that relies on exhorting donors, and (3) the wellknown limitations of the nonprofit organizations that are the key actors in this production system.

I

Introduction

THE PROPOSAL BY A PROMINENT organ transplant center earlier this year to hasten the death of potential organ donors illustrates the extreme measures being considered to mitigate the desperate shortage of organs. The ban on markets in organs is blamed for shortages that have resulted in long waiting lists (one-fifth of those waiting for heart transplants reportedly die while waiting) that have caused many deaths and worsened the plight of many more forced to live with disabling conditions (United Network for Organ Sharing 1995). Reflecting the general pessimism that the supply of organs can not be increased, the government held hearings in December 1996 that focused on the agonizing issues of how the current inadequate supply might be allocated more equitably.

Has our system of procuring organs, which relies strictly on donation, in fact reached the limit of its potential to generate supply? It is widely believed that if only we allowed a market in organs, supply would increase and shortages would disappear. But we should be driven to such thinking only if we are convinced that we have wrung all the supply we can out of the donative system.

To give up on our donative system, we would have to believe that the supply of donated organs is naturally constrained, a view that reflects the belief that altruists are born and not made. If altruism can't be cultivated, then efforts to educate the public about the need for the organs or to persuade them to donate would, of course, be useless and unproductive. But this notion defies both common sense and experience. If persuasive individuals of the moral stature of, say, Jimmy Carter or Colin Powell were enlisted to appeal to families of potential donors, isn't it reasonable to expect that acts of altruism might be inspired among many regular people? Even more, since we don't use markets to obtain organs, we are asking procurers to urge, plead, coax, cajole, and otherwise exhort families, hospital staff, and physicians. Can we not expect that more effort on procurement would yield more organs?

In a recent study (Thorne 1996), I reported that in 1990 the cost of these "exhortation" activities directed at procuring donated human organs amounted to approximately \$1,650 per organ. This cost is striking for at least two reasons: (1) next to costs of more than \$3 billion for the nearly 16,000 U.S. organ transplants performed each year, the \$25 to \$35 million I estimated as the approximate annual cost of procuring donations is trivial; and (2) it may be the case that small additional investments in obtaining organs would yield a big payoff.

In fact, increased spending on procurement effort is associated with an increased yield of organs. We can see this in two ways. A 50% increase in the aggregate real spending on acquiring organs between 1988 and 1990 was associated with a 13% rise in the total number of kidneys procured. This finding is consistent with the notion that more effort yields more organs. Furthermore, a cross-sectional analysis of procurement organizations, in the same study, revealed that organizations that engaged in greater effort procured more donations.

One might well wonder why there are shortages if the cost of exhorting and cajoling families, hospital staff, and physicians is so cheap. In other words, if shortages in organs are due, as they appear to be, to inadequate effort rather than the inefficiency of appeals to donor altruism, why is there insufficient effort?

Perhaps the regulatory authorities and the participants are ignorant of the nature of the production system in which they are engaged. Or, perhaps the production system relying on exhorting donors is inherently problematic.

Or, perhaps the shortage is due to the well-known limitations of the nonprofit organizations that are the key actors in this production system.

I explore all these possibilities in this article. In addition, I show that goods such as organs, in which markets are banned, have attributes of common property—a feature that might also contribute to shortages. I conclude that shortages may be due not to inadequate altruism but rather to failure to exploit the donative system's potential efficiencies.

#### Procuring Organs by Exhorting Donors

LET THE TERM "EXHORTATION" be used to describe the non-price efforts used to secure market-inalienable goods and services.<sup>1</sup> Exhortation includes efforts to inform and persuade all participants in the donative system who cannot be paid for what they supply. In the case of organs, exhortation includes efforts by procurement organizations to get next-of-kin to donate organs, and also efforts directed at physicians and hospital staff to identify, without financial remuneration, potential donors.<sup>2</sup>

Clearly, markets and command systems also rely on exhortation in the form of advertising, social marketing, and public education. In fact, exhortation might be used to secure what can neither be bought nor commanded, such as loyalty, friendship, devotion, and even love. A marvelous illustration of the need for exhortation (and/or intimidation) even in the face of apparently complete property rights is given by Barzel (1989) in his explanation of how it was possible for slaves in the Antebellum South to accumulate assets with which to buy their freedom.<sup>3</sup> Even under command systems exhortation in the form of moral suasion is very much a feature of organization (Adler and Pittle 1984; Bernardo 1971; Siegelbaum 1988).

The donative system's reliance on exhortation is especially striking in that exhortation is the sole means of procuring market-inalienable goods. Moreover, for some market-inalienable goods, possibly including organs, the number of goods procured will be directly related to the exhortation effort expended. The costly exhortation activities used by procurement agencies to secure supply ought to be viewed, therefore, as a production technique that is an alternative to expropriating or paying donors directly.

Organs are one of a class of goods that differ from conventional **goods** in that people respond to campaigns that exhort them to **donate** when markets are banned. The conventional view of what happens when the price of a good like gasoline is fixed below market equilibrium is that competition for the good encourages consumers to undertake wasteful activities, such as queuing, that would be unnecessary in a market. As with gasoline, when the price of human organs is set at zero, activities that some may deem wasteful are observed. However, the "wasteful" activity by demanders of organs includes exhorting suppliers to donate. Whereas exhorting suppliers to donate a good like gasoline is not likely to yield much success, individuals do respond to pleas for donations of human organs. Thus, exhorting suppliers to donate a market-inalienable good like an organ may not merely redistribute supply; it may also enlarge supply, even beyond what a market would generate.

Exhortation will produce a supply that exceeds the market supply when the cost to procurers of supply garnered by exhortation is lower than the cost of market-generated supply. How can this happen? Part of the answer lies in what motivates donors to respond to exhortation campaigns. Donors respond to exhortation for reasons that may include a sense of duty,

responsibility, love, undefined psychological reward, utility, and so on. Exhortation by procurers can be thought to supply these donors with information. Because information elicits supply, the number of organs supplied under a market ban should depend on the level of effort expended on exhortation. The other part of the answer depends on the behavior of procurers designed to appeal to these motives. The approach outlined here focuses not on the efficiency of donor motives (i.e., altruism vs. self-interest) but rather on the efficiency of the actions of procurers that appeal to these motives (i.e., exhortation vs. payments).

The nature of the donative system and its reliance on exhortation is complex, but for the purposes of this theoretical essay, it is sufficient to accept that (1) exhortation is an important feature of the **donative** system, (2) considerable sums of **money** are spent exhorting people to give, and (3) for some **goods** and services people respond to exhortation by **donating**. Whatever the motive for donation, exhortation elicits supply and there is no theoretical basis for asserting that the supply generated by exhortation must be smaller than market supply.

An additional complexity to the donative system's reliance on exhortation is that, as the next section demonstrates, market-inalienable goods are in essential ways common property with exhortation of donors serving as "fishing" from the common pool. As will be seen, the appropriate supply of market-inalienable goods by means of exhortation is the supply from the commons.

#### Exhortation as Fishing for Common Property Organs

If goods were arrayed according to the property rights that appertain to them, then at one extreme would lie private property, to which all three aspects of property rights (use, ownership, and alienability by sale or **donation**) are completely assigned. At the other end would lie **goods** to which none of the property rights is assigned. Near this extreme lie common property goods, to which people have a use right but not the right to exclude others or to sell or give away the use right. Fish in the deep sea are an excellent example of common property. For technical reasons, it has so far been difficult to establish and enforce property rights in the ocean. Because everyone can fish and no one can be excluded, the right to fish is worthless.

When man-made restrictions on property rights limit the right to sell a good, but do not assign the rights to the economic value that the resource can earn, then a mixture of private and common property rights is obtained. While individuals are unable to sell market-inalienable **goods**, they are free to **donate** and, if they choose to **donate**, they can also choose the recipient of the donation.

A market-inalienable good like a human organ is not naturally a common-property good because completely defined property rights could be established without difficulty. As distinct from common-property goods such as fish, air, or minerals, no technical difficulties would be associated with barring free riders from enjoying the use of human organs. In short, market-inalienable goods could be treated as private goods in the United States, as they are in many parts of the world.

However, by leaving the right to the economic value of market-inalienable goods unassigned, banning a market makes market-inalienable goods common property in a fundamental way. Because a market-inalienable good (and its economic value), once donated, will belong not to the owner but to the

party to whom the good is donated, the good appears, from the perspective of those who want it, as common property. Someone who wants the market-inalienable goods will engage in activities to obtain them that will be remarkably similar to the activities of someone "fishing" in common property waters. A fisher will invest his labor and capital to catch a fish by dangling a worm before it. If the fisher is successful, then, even though the fishing effort may have been costly, the fish itself is free to him. Likewise, someone wishing to obtain a market-inalienable good has every incentive to engage in costly exhortation/fishing-type activities that, if successful, will yield him the good for free. In short, banning a market in a good, by leaving the right to its economic value unassigned, allows everyone access to its free value and, in effect, creates a man-made common property resource.

In short, an essential feature of market bans is that they make the good or **service** of interest into common property, and nonmarket efforts to exhort suppliers to donate organs are fundamentally analogous to "fishing" in a commons.

The conventional analysis of the commons shows that it is overexploited, leading to Hardin's famous "tragedy of the commons." For at least some market-inalienable goods and services, however, the overexploitation of the commons could, in theory, lead to a supply even greater than market supply. And unlike the over-fishing of the ocean commons, an oversupply of a market-inalienable good like human organs would not reduce future supplies. Rather, organs otherwise fated to be discarded would be procured. This unforeseen blessing of the market-inalienable commons directly challenges one of the principal objections to market bans—that they necessarily cause shortages.

### III

#### Why the Organ Shortage?

IN THE ABSENCE OF A MARKET we cannot know what the market price would have been. However, the cost of procuring organs under the donative system seems not prohibitive, perhaps even cheap. How, then, are we to understand the apparent shortages in organs if exhortation is a cheap means of procuring organs? In other words, why is there "underexhortation"? What are the obstacles to increased and more effective effort that might yield greater supply and more fully exploit the donative system's efficiency?

Some of the obstacles may lie in the reliance on exhortation to secure organs and with difficulties associated with the organization of organ procurement by nonprofits. The government may also be inadvertently retarding the supply of organs.

#### Relying on Exhortation

Perhaps the most significant obstacles consist in the difficulties associated with relying on exhortation as a means of procurement. First, exhorting donations shares with advertising the difficulty of relating the level of effort to outcome. This is captured by the anecdote of the advertiser who says, "I waste half my advertising budget. I just don't know which half." The difficulty in measuring the effectiveness of effort could mistakenly lead to less effort than warranted.

Second, a procurement agency that exhorts people to **donate** marketinalienable **goods** may view its efforts as increasing total procurement rather than its particular share of the total. The inability to

exclude free riders--an attribute of a public good--would tend to reduce exhortation from its efficient level.

Furthermore, it is unclear whether an organ procurement organization's (OPO's) efforts directed at physicians and hospital personnel to refer patients to them is an effective means for garnering referrals. With regard to the difficulty of getting physicians to inform the OPO of a donor, Shumway (1993) says that "the doctors attending the brain-dead individuals don't want to bother. When the patient is finally brain-dead, the last thing they want to do is call an organ donation center and do more work to give away organs of the person they were trying to save."

A feature that distinguishes the organ commons from the fish commons is the fact that hospitals, unlike fishers, cannot be paid for the value they add to their "catch." Suppose that some fishers were to specialize in locating the fish. When they find some fish, they call in others who catch the fish. The fish catchers can pay the locators (or vice versa); thus, only the fish need to be "exhorted." In the organ case, both the fish (potential donors) and the locators (the hospitals) need to be exhorted, complicating both the analysis and the regulation.

Quite possibly, exhorting family members to donate is cost-effective because families view donation as somehow redeeming the deaths of their loved ones. But physicians and hospital staff may view involvement with donation as a bothersome task that subjects them to malpractice litigation and distracts them from attending to their living patients. If so, then exhorting these "locators" to refer patients may not be cost-effective. Accordingly, organ procurement under a donative system might be inadequate, but not because altruism on the part of organ donors is an insufficient motivator for supply. Rather, the system's inefficiency may be due to a failure of organization; that is, the system's inability to provide incentives to other integral actors in procurement, such as the hospital staff and physicians.

#### Organs Are Procured by Nonprofit Organizations

The procurement and distribution of blood and other tissues by the human tissue industry is dominated by nonprofit organizations. Nonprofits are suited to this role because both organ donors and recipients prefer to deal with them. Organ recipients prefer nonprofits because they want high-quality, disease-free organs and nonprofits are thought to provide superior quality. Organ donors prefer nonprofits because anonymous altruism (i.e., altruism by a stranger to a stranger) is subject to a market failure because donors do not know and are not in contact with the recipients of their donations. Donors therefore need trustworthy agents. In addition, nonprofits dominate the human tissue industry because of the questionable ability of forprofit firms to persuade suppliers to donate an organ that the forprofit intends to resell.

In theory, nonprofits are in a position to use the surpluses they generate to supply more organs than their forprofit counterparts. They might also use their surpluses to supply a higher quality organ, charge less for the organs they supply, or finance other worthy activities. Nonprofits might, furthermore, supplement their revenues from organ sales with donated funds if they are able to fund-raise. In that case, they might even be willing to take losses.

But nonprofits also face conditions that would tend to reduce their supply of organs.

#### Problems with Nonprofits



Nonprofits might underexhort for several reasons. First, nonprofit procurement organizations might not exhort efficiently because profits are an important motivator of management efficiency and because the profit motive is a powerful incentive for ensuring that firms enter an industry and expand when the demand for the industry's product increases. Furthermore, the attempts by nonprofit organizations to grow to achieve economies of scale often fail because mergers and acquisitions cannot take place through market mechanisms.

Second, if the nonprofit is a monopolist, it may prefer to seek donations at a lower level of output that would allow it to retain a monopoly surplus, which, under the best of circumstances, it would use to further other worthy objectives of the organization. The American Red Cross could, for example, use surpluses to finance disaster relief.

Third, nonprofits may be severely limited in their ability to raise capital since they are unable to sell equity shares, and must rely largely upon donations, retained earnings, and debt for capital financing. Thus, they may be incapable of financing an efficient level of exhortation.

#### Government Oversight

The effectiveness of exhortation is so little understood that the federal agency in charge of organ procurement, the Health Care Financing Administration, puts considerable pressure on OPO's to spend less on exhortation-related activities! Thus, not only is there a lack of support for additional procurement effort, but current pressures from the federal government are actually in the direction of reduced effort, an approach likely to result in false efficiencies. The Inspector General of the Department of Health and Human Services and Aetna, the insurance company responsible for overseeing financial aspects of the government program, have repeatedly denounced the rise in organ acquisition costs and called for reductions. A report by this Inspector General (1987, 13) laments the fact that "kidney acquisition costs continue to be reimbursed by Medicare on a 'reasonable cost' basis," and he says that "quite clearly, a substantial portion of the Medicare funds spent on kidney acquisition are being spent unnecessarily." IV

#### Conclusion

THIS EXAMINATION OF THE DONATIVE SYSTEM for procuring organs has revealed that such a system, relying on the procurement of common property organs by exhortation by nonprofit organizations, may obtain organs at a cost that is low, perhaps even lower than the market cost. It has also been shown that significant obstacles may exist to effective exploitation of the donative system's potential efficiencies.

For a donative system to be effective, regulation that bans the market must also address the obstacles to sufficient and effective exhortation mentioned earlier. These obstacles were identified as arising from (1) the nature of exhortation, (2) the fact that the market-inalienable good's rent is common property, and (3) the characteristics of the nonprofit organizations that procure market-inalienable goods. How the interplay of these elements affects the efficiency of the donative system depends on the nature of the market-inalienable good and the condition of supply and demand. Consequently, the regulation of each type of good should reflect its specific features.

In general, regulation banning a market should assign the good's rent to

some party, unless the inefficiency of leaving it as common property will result in a greater supply or lower cost, or yield some other benefit. One way of assigning rights to other factors in the commons--such as fish in the ocean or broadcast frequencies in the air--is by auctioning licenses that grant exclusive rights to these resources. If people are unlikely to donate to for-profit firms, then auctioning licenses that would permit such firms to solicit donations may not be practical.

The government could grant designated nonprofits monopolistic rights to exhort in specific regions. This is, in effect, how the government currently regulates procurement of organs. While granting local monopolies would eliminate any overexhortation problems, the problem the current organ procurement system appears to face is underexhortation.

Alternatively, the regulation banning a market might not assign property rights at all; this is the case with regard to babies offered for adoption and tissue used to produce pharmaceuticals. Competition that dissipates the common property rent can be expected to result from this approach. This dissipation of common property rent will also occur when a market is legal but it is common practice to avoid that market, as with blood procurement. Although there is no regulation banning a market in blood, nearly all blood procured for transfusion is donated. If more of the market-inalienable good can be procured by not assigning property rights, even if such procurement is inefficient, government may still intentionally and knowingly make good common property.

No matter how the market-inalienable good is regulated, as long as its economic value influences expenditures on procurement or the party to whom it is allocated, some notion of commodification must be introduced, perhaps indirectly. How might "indirect commodification" work in the human organ arena? Some have suggested that, in lieu of paying for organs, the donated organs should be treated as "rewarded gifts" with donors being compensated for the inconvenience, hospitalization, and loss of income necessitated by the donations. Others have devised sophisticated schemes whereby donors might receive tax breaks, or payments from insurance companies, for the right to their organs upon their death. And others have proposed to pay families of brain-dead cadavers a \$1,000 "death benefit" for their loved ones' organs. These schemes will likely elicit supply because they offer an incentive, but they are limited by their inability to ensure that the payments made to donors will elicit the optimum supply. Furthermore, the payments are not sufficiently indirect to appear as anything but payments.

Another alternative would be to assign the economic value of the organ, by law, to those regional nonprofit organizations currently designated as franchises by the organ procurement system. Under this alternative, these nonprofit franchises would be permitted complete property rights to the organ they manage to procure. The nonprofits would distribute the organ and be allowed and encouraged to charge the full value of the organ to intermediaries such as transplant surgeons, hospitals, or pharmaceutical companies. In effect, a market in organs would exist, but it would function at a later stage in the production process. Rather than charging a price based on cost plus administration, each nonprofit would charge the market price that reflects what the donor would have received had a market existed. Recipients of the organ would pay what the market price would have been.

Some nonprofits would use their surplus to finance additional exhortation of potential suppliers. Others would use the surplus to further worthy programs such as public education to increase donation. The regulators would monitor and publicize the activities of the nonprofits to assure that

the surpluses are used in desirable ways, and not dissipated. Properly administered, this system would keep middlemen from appropriating the value of the organ, and would also promote productive efforts to procure the property rights to the free organs.

However, as Barzel (1989) has argued, even legal assignment of complete property rights to nonprofits may still leave the property right not fully delineated. Consequently, assignment of the property right to the economic value of the organ may still not eliminate the leverage of other parties involved in procuring organs as they seek to obtain a share of the organ's rent. Specifically, with regard to organ procurement, the procurement organizations are unable to approach the families of potential donors without first being informed of their existence by physicians and hospital personnel. The cooperation of physicians and hospital personnel is thus essential to the success of the donative system. But physicians and hospital personnel may not be easily moved to cooperate. For them, the act of donation may not have the significance that it may have for the donating families. Indeed, the most effective solution may be to allow these providers to receive a finder's fee, all the while continuing the ban on an organ market. Under current interpretation of the law, however, no such payment ("finder's fee") is permitted. Instead, in 1990, medicare required that providers inform the procurement organizations when potential donors arrive at their facilities. Therefore, additional administrative measures may be required to enforce this policy.

The problem of balancing the need for markets against the aversion to commodification is not an unusual one; societies are often confronted with the need to govern in the face of commitments to contradictory principles. To mediate these conflicts, "legal fictions" are sometimes created that appear to support both contradictory principles by adhering to the letter of one while eviscerating its spirit, and the letter as well as the spirit of the other. A cynic might view legal fictions as devices that hypocritically disguise the inconsistency and are effective only because what they are being deployed to do is not transparent. However one views legal fictions, they can be useful. Indeed, we might seek to resolve the dilemma of how to procure and allocate market-inalienable goods in an economically rational manner, without at the same time commodifying and exploiting human beings, by the deliberate use of legal fictions. The proposal offered here to maintain a donative system while implementing markets at a step once-removed, to balance the competing need for markets against the aversion to commodification, is but one of a class of solutions of this type of legal fiction. Together with the proposed measures to overcome the obstacles to sufficient and effective exhortation, these measures might help the donative system achieve its potential efficiencies.

The point here is twofold. First, not all strategies for directing effort are equal and we need more analysis to refine the system and fully exploit its potential. Second, and related, if the current system appears to be a failure, we should be clear that the inefficiencies are not necessarily inherent in a procurement system based on altruism and donation as many claim; the inefficiencies may stem from missteps-such as directing effort poorly that arise from a lack of understanding. Further study would light the path to better targeted, more effective procurement efforts. While many of the questions in this area are complex, fortunately there are data and analytic techniques that can be brought to bear on them.

Footnote:

Notes

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1. The interested reader can consult Thorne (1998) for a more comprehensive analysis of the economics of market-inalienability.

2. Radin (1987) coined the term market-inalienable to characterize goods to which individuals have all property rights except the right to alienate through sale.

3. The puzzle is: How could a slave obtain the assets to buy his freedom when the slave owner had complete property rights to the slave and any assets the slave could accumulate to buy his freedom already belonged to the owner? Barzel's answer (1989) is that the slave owner still had to spend money to enforce his property right to the slave. That is, the owner had to hire a guard to exhort/intimidate the slave. This "transaction" cost drove a wedge between what the slave could earn if he were working for himself and his net value to the owner. Barzel argues that "[t]he need for supervision and the desire to economize on its cost made ownership of slaves less than fully delineated" and that "slaves were able to capture some of these undelineated rights—in this case rights to themselves" (p. 110).

Footnote:

Because a slave's potential output was subject to error and because setting production quotas too high would destroy the slave, it was in the slave owner's self-interest to set quotas below what a slave could actually produce. Barzel suggests that it was also in the slave owner's self-interest to permit slaves to own and accumulate some of the excess production above the quota. Thus, "partly due to skills in feigning inability on the one hand and to activities such as fishing on the other, and partly due to the luck of having errors made in their favor" (p. 110), some slaves were eventually able to buy their own contracts. Barzel's general conclusion is that "because transacting is costly, as an economic matter, property rights are never fully delineated" (p.110).

Reference:

References

Reference:

Adler, R. S., and R. D. Pittle. 1984. "Cajolery or Command: Are Education Campaigns an Adequate Substitute for Regulation." Yale Journal on Regulation, Vol. 1, No. 2, 159193.

Reference:

Barzel, Y. 1997. Economic Analysis of Property Rights. New York: Cambridge University Press.

Reference:

Bernardo, R. 1971. The Theory of Moral Incentives in Cuba. University of Alabama Press. Office of the Inspector General. 1987. Organ Acquisition Costs: An Overview. Department of Human Services, Office of Analysis and Inspections. Radin, M. J. 1987. "Market-Inalienability." Harvard Law Review, 100.

Shumway, N. 1993, in E. Rosenthal, "Parents Find Solace in Donating Organs," New York

Times, May 11, cl.

Siegelbaum.1988. Stakhanovism and the Politics of Productivity in the USSR, 1935-1941. New York: Cambridge University Press.

Thorne, E. D. 1996. "The Cost of Procuring Market-Inalienable Human Organs." Journal of Regulatory Economics, September, Vol. 10, 191-200.

Thorne, E. D. 1998. "When Private Parts Are Made Public Goods: The Economics of Market-Inalienability." Yale Journal on Regulation, Vol. 15, No. 1, 149-176.

United Network for Organ Sharing. 1995. 1995 Annual Report on the U.S. Scientific Registry for Transplant Recipients and the Organ Procurement and Transplantation Network. Richmond, VA.

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...TEXT: paying donors directly.

Organs are one of a class of goods that differ from conventional **goods** in that people respond to campaigns that exhort them to **donate** when markets are banned. The conventional view of what happens when the price of a...

...essay, it is sufficient to accept that (1) exhortation is an important feature of the **donative** system, (2) considerable sums of **money** are spent exhorting people to give, and (3) for some **goods** and services people respond to exhortation by **donating**. Whatever the motive for donation, exhortation elicits supply and there is no theoretical basis for ...

...to which all three aspects of property rights (use, ownership, and alienability by sale or **donation**) are completely assigned. At the other end would lie **goods** to which none of the property rights is assigned. Near this extreme lie common property...

...private and common property rights is obtained. While individuals are unable to sell market-inalienable **goods**, they are free to **donate** and, if they choose to **donate**, they can also choose the recipient of the donation.

A market-inalienable good like a...In short, an essential feature of market bans is that they make the good or **service** of interest into common property, and nonmarket efforts to exhort suppliers to donate organs are...

...mistakenly lead to less effort than warranted.

Second, a procurement agency that exhorts people to **donate** marketinalienable **goods** may view its efforts as increasing total procurement rather than its particular share of the...best of circumstances, it would use to further other worthy objectives of the organization. The **American Red Cross** could, for example, use